Sea Marshall AU9 User Manual
(General Purpose, WF, ATEX, HT, Dive)

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October 2015

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1 Introduction

The following symbols and conventions are used to indicate important information. Always observe these instructions.

Warnings: Instructions that, if ignored, could result in death or serious personal injury caused by incorrect operation of the equipment. These must be observed for safe operation.

Cautions: Instructions that, if ignored, could result in personal injury or material damage caused by incorrect operation of the equipment. These must be observed for safe operation.

Important Note: Important instructions that should be adhered to during system operation.

Typographic Conventions

1. Hardware features are displayed in bold uppercase letters, e.g. **ARMING SWITCH**.
2. Operation states are displayed in bold uppercase letters surrounded by square brackets, e.g. **[OFF]**.

Using your sMRT AU9 for the First Time

Carefully read the Warnings and Safety Information section in this manual prior to using the Sea Marshall AU9 for the first time. To operate correctly, the Sea Marshall AU9 should be professionally fitted to an MRT approved SOLAS rated PFD by a service centre authorised by MRT. Visit the MRT website www.mrtsos.com for specific instructions on accessing the Sea Marshall AU9.

Prior to first use perform a system test to confirm the device is operating correctly.

WARNING: When the Sea Marshall AU9 is fitted inside a PFD instead of a purpose-built sMRT pouch, DO NOT unzip the main PFD zip. Use the Sea Marshall AU9 access point zip in the life jacket to prepare the device for use.

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2 Glossary of Terms & Acronyms

AIS	Automatic Identification System: Automatic tracking system used on ships and by vessel traffic services for identifying and locating vessels by electronically exchanging data with other nearby ships, AIS base stations, and satellites.
AMSA	Australian Maritime Safety Authority
DSC	Digital Selective Calling – technology used to automate calling on terrestrial marine radio systems.
ECDIS	Electronic Chart Display and Information System
EPIRB	Emergency Position Indicating Radio Beacon.
FCC	US Federal Communications Commission
MAYDAY	Voice distress priority message
MMSI	Maritime Mobile Service Identity (DSC identity number)
MSLD	Maritime Survivor Locating Device
MSLS	Maritime Survivor Locating System
PFD	Personal Flotation Device
PLD	Personal Locating Device
RDF	Radio Direction Finding
RTCM	Radio Technical Commission for Maritime Services
SAR	Search and Rescue
SOLAS	International Convention for the Safety of Life At Sea.
USCG	US Coast Guard
VHF	Very High Frequency radio band – 30 to 300 MHz.

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3 Warnings & Safety Information

WARNINGS:

- The Sea Marshall AU9 is not an EPIRB and its emergency transmissions are not detected by orbiting satellites. The device is a short range Personal Locating Device (PLD), which uses 121.5MHz Radio Direction Finding (RDF) techniques.
- Perform a full system test before use.
- The Sea Marshall AU9 should **ONLY** be used in an emergency. DELIBERATE MISUSE MAY INCUR A SEVERE PENALTY.
- DO NOT store or transport the unit in a wet or high moisture environment to avoid accidental activation.
- Do not dismantle the Sea Marshall AU9 as it contains no user-serviceable parts. MRT Ltd. and authorised service agents offer a full and comprehensive service and repair facility for recertification of units and battery replacement.
- DO NOT tamper with the **AUTO ACTIVATION WATER SENSOR** on the top and bottom of the unit
- The Sea Marshall AU9 emits radio frequency radiation when in use. Avoid handling the antenna unnecessarily when activated.

LIFE JACKET & PERSONAL PROTECTIVE EQUIPMENT (PPE) USAGE WARNINGS:

- The Sea Marshall AU9 must only be fitted/attached to life jackets approved by MRT Ltd.
- Only MRT approved attachment kits/pouches are to be used to attach the unit to the life jacket.
- The Sea Marshall AU9 must be fitted strictly in accordance with the life jacket manufacturer & MRT's instructions as supplied.
- The Sea Marshall AU9 must only be fitted by an approved service centre authorised by MRT and/or the life jacket manufacturer.
- The life jacket is to be serviced according to the manufacturer's specifications.
- It is the user's responsibility to ensure that any ancillary equipment, such as survival suits/harnesses, PPE, clothing etc., does not interfere with the operation of the Sea Marshall AU9.

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CAUTION:

- Do not paint the Sea Marshall AU9 or clean it with aggressive detergents or solvents. Some cleaning materials may damage the seals and affect the integrity of the device.
- Wipe the unit with a soft, damp cloth if it requires cleaning and dry thoroughly.

The Sea Marshall AU9 could save your life,
treat it with respect at all times.

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4 Sea Marshall AU9 Overview

This user manual provides all the information required to operate and test the Sea Marshall AU9 PLD. The Sea Marshall AU9 transmits on the 121.5 MHz search and rescue (SAR) frequency and can be used to locate a man overboard using a 121.5MHz receiver such as the MRT Crewguard MKII or MRT SARfinder MKIII receiver.

Crewguard MKII Base Unit
MSLS Receiver

SARfinder MK III Base Unit
MSLS Receiver

Sea Marshall AU9 Activation

When armed, the Sea Marshall AU9 is designed to automatically activate in an emergency when immersed in water. There is an **AUTO ACTIVATION WATER SENSOR** sensor on the top and bottom of the unit. If the unit is continuously immersed in salt or fresh water it will 'awaken' and auto-activate. A predetermined 2 second delay period prevents device activation caused by spray, rain and splashing.

The Sea Marshall AU9 can also be manually activated by pressing the round rubber **ACTIVATION BUTTON** on the front of the device when armed. The design of the **ARMING SWITCH**, in conjunction with the unit's **RUBBER O-RING**, prevents the device from being accidentally activated while being carried or in transit.

The Sea Marshall AU9-D dive version does not have a round rubber **ACTIVATION BUTTON** and the **ARMING SWITCH** is used to manually arm and activate the device.

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Sea Marshall AU9 Product Range

There are five versions of the Sea Marshall AU9 available for different marine operating environments and each version of has a unique colour-coded **ARMING SWITCH** for identification. This manual is applicable to all these versions.

Model AU9: General Purpose

(Yellow Switch)

- 2 second auto-activation (upon continuous immersion)
- Manual activation
- LED strobe on antenna
- Automatic low battery warning indicator
- 100mW
- Test unit Also available using 121.65MHz

Model AU9-WF: Wind Farm/Renewable Energy (Green Switch)

- 2 second auto-activation (upon continuous immersion)
- 40 second fail safe auto-override
- Manual activation
- LED strobe on antenna
- Automatic low battery warning indicator
- 500mW power output
- Test unit also available using 121.65MHz

Model AU9-X: Zone2 Oil/Gas

(Black Switch)

- 2 second auto-activation (upon continuous immersion)
- 40 second fail safe auto-override
- Manual activation
- LED strobe on antenna
- Automatic low battery warning indicator
- 100mW power output
- SIRA ATEX Approved
- Test unit also available using 121.65MHz

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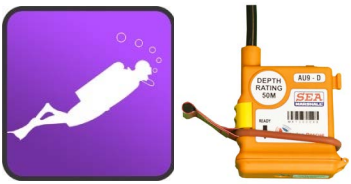
Model AU9-HT: Helicopter Transit (Red Switch)

- 2 second auto-activation (upon continuous immersion)
- 40 second fail safe auto-override
- Manual activation
- LED strobe on antenna
- Automatic low battery warning indicator
- 100mW power output
- Test unit also available using 121.65MHz



Model AU9-D: Diving

- Manual activation only
- LED strobe on antenna
- Depth rating 50m
- Automatic low battery warning indicator
- 500mW power output

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4.1 Sea Marshall AU9 Features

Sea Marshall AU9 Front

1. **ANTENNA**.
2. **AUTO ACTIVATION WATER SENSOR**.
3. Product name.
4. **ACTIVATION BUTTON GUARD**.
5. Label with device recertification date.
6. Front label with serial number.
7. **RUBBER O-RING** restrainer for **ARMING SWITCH**.
8. **BASE CAP** (hinged, not separate).
9. **AUTO ACTIVATION WATER SENSOR**.
10. Restrainer **GRAB TAG** for **ARMING SWITCH**.
11. **ARMING SWITCH**.
12. Round rubber **ACTIVATION BUTTON** (for activation and function testing).

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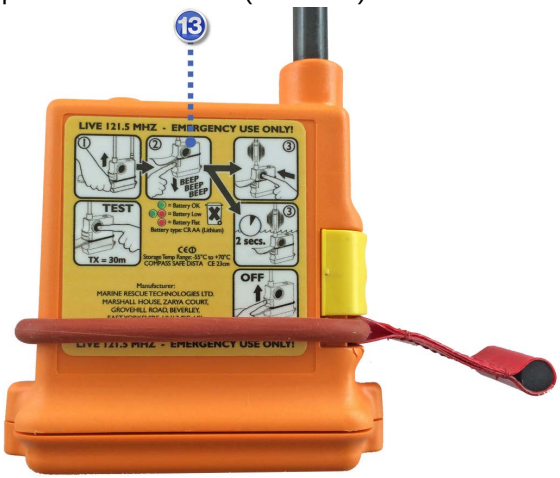
13. Operation instructions (rear label).



Sea Marshall AU9 Rear

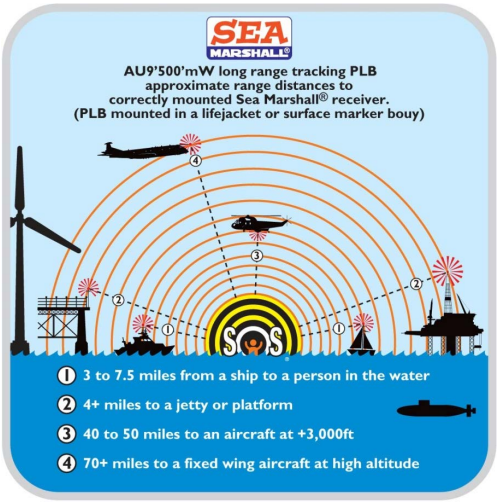
Note: The Sea Marshall AU9-D dive version PLD has no round rubber **ACTIVATION BUTTON** and the rear label instructions are different.

AU9-D Front

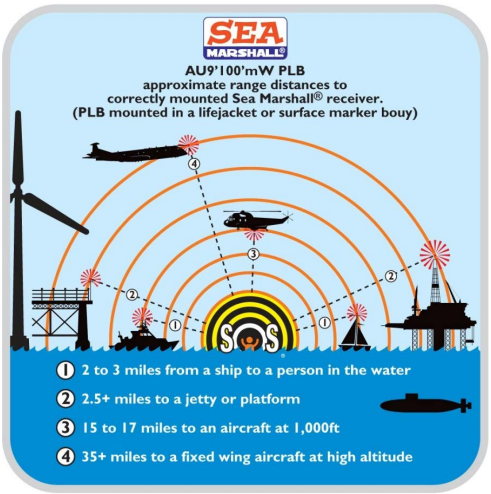
AU9-D Rear

4.2 AU9 Range Comparison

The Sea Marshall AU9, AU9-X and AU9-HT transmit 100mW 121.5MHz signals. The Sea Marshall AU9-WF and AU9-D transmit 500mW signals. The 100mW version has approximately half the tracking range of the 500mW version.


SEA MARSHALL
AU9'500'mW long range tracking PLB
approximate range distances to
correctly mounted Sea Marshall® receiver.
(PLB mounted in a lifejacket or surface marker bouy)
1 3 to 7.5 miles from a ship to a person in the water
2 4+ miles to a jetty or platform
3 40 to 50 miles to an aircraft at +3,000ft
4 70+ miles to a fixed wing aircraft at high altitude

Sea Marshall AU9 500mW Version


SEA MARSHALL
AU9'100'mW PLB
approximate range distances to
correctly mounted Sea Marshall® receiver.
(PLB mounted in a lifejacket or surface marker bouy)
1 2 to 3 miles from a ship to a person in the water
2 2.5+ miles to a jetty or platform
3 15 to 17 miles to an aircraft at 1,000ft
4 35+ miles to a fixed wing aircraft at high altitude

Sea Marshall AU9 100mW Version

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WARNING: The tracking ranges displayed are the results from tests where the receiver antenna was correctly installed at the recommended height and the Sea Marshall AU9 was correctly fitted into a PFD. Wearing the device in any other manner will reduce the tracking/alerting ranges to below those displayed.

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5 Sea Marshall AU9 Operation

WARNING: When the Sea Marshall AU9 is fitted inside a PFD instead of a purpose-built sMRT pouch, DO NOT unzip the main PFD zip. Use the Sea Marshall AU9 access point zip in the life jacket to prepare the device for use. The Sea Marshall AU9 should only be used in an emergency. DELIBERATE MISUSE MAY INCUR A SEVERE PENALTY.

The Sea Marshall AU9 must be professionally fitted to an MRT approved SOLAS rated PFD to operate correctly. This ensures the device is in the most effective position for water activation and emergency transmissions, while the PFD assists the casualty to remain afloat and face-up when in the water.

The Sea Marshall AU9 is normally inserted into a purpose-built pouch for stability. The device is **[OFF]** when shipped and needs to be configured in the **[READY]** state prior to use.

WARNING: See the MRT website www.mrtsos.com for specific instructions on accessing the Sea Marshall AU9 inside your sMRT PFD.

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Arming the Sea Marshall AU9, AU9-X, AU-9-WF and AU9-HT

This procedure arms the device for both manual and auto-activation.

1. Remove the Sea Marshall AU9 from its pouch.

2. Lift the **RUBBER O-RING** up and over the **ARMING SWITCH**.

3. Push the **ARMING SWITCH** down to the **[READY]** position until it clicks into place and ensure the **RUBBER O-RING** is positioned in the gap above the **ARMING SWITCH**.

Note: After arming the unit it will beep 3 times to confirm it has been armed and a **GREEN LED** will flash every 60 seconds thereafter.

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4. Reinsert the unit in the pouch. The Sea Marshall AU9 is now ready for use.

WARNING: After arming the unit it can remain in the life jacket for 12 months until the jacket and beacon require servicing and recertification. Before returning the unit for servicing and recertification it must be made safe:

1. Slide the **ARMING SWITCH** up to the **[OFF]** position and then lift and pull the **RUBBER O-RING** down and over the **ARMING SWITCH**.
2. Ensure the **RUBBER O-RING** is positioned in the gap below the **ARMING SWITCH**.

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Activating the Sea Marshall AU9, AU9-X, AU-9-WF and AU9-HT

Activation commences transmissions on the 121.5 MHz search and rescue (SAR) frequency. Sea Marshall AU9 transmissions continue after activation until the device is disarmed/switched **[OFF]**. When the unit is armed there are two methods of activation.

1. Press the round rubber **ACTIVATION BUTTON**.

2. The Sea Marshall AU9 also activates automatically after 2 seconds of continuous immersion in water.

Audio **SOS BEEPs** can be heard approximately every 30 seconds and flashing **RED LEDs** are visible when the unit is transmitting on full power. This pattern cycles continuously until the unit is disarmed/switched **[OFF]**.

Important Note:

- The unit has two **AUTO ACTIVATION WATER SENSORS** (a metal screw on top of the unit and within the base cap). Both these sensors have to be continuously immersed for a period of not less than 2 seconds to allow the unit to wake up and auto-activate, this prevents inadvertent activation by spray, rain or splashes.

CAUTION:

- AU9-X, AU9-HT and AU9-WF units are fitted with a 40 second fail-safe/override function. These units will also automatically activate after 40 seconds of constant immersion in water if the unit is accidentally disarmed/switched **[OFF]** but is in a man overboard

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emergency situation.

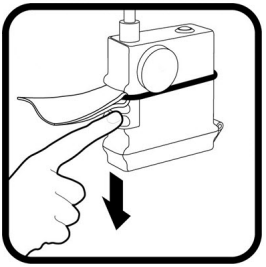
- DO NOT store or transport the unit in a wet or high moisture environment to avoid accidental activation.

Arming and Activating the Sea Marshall AU9-D

The Sea Marshall AU9-D dive version PLD does not have a round rubber **ACTIVATION BUTTON**.

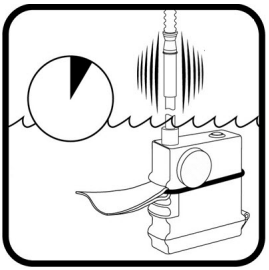
1. Lift the **RUBBER O-RING** up and over the **ARMING SWITCH**.

2. Slide the **ARMING SWITCH** down to **[READY]** to arm and activate the Sea Marshall AU9-D.



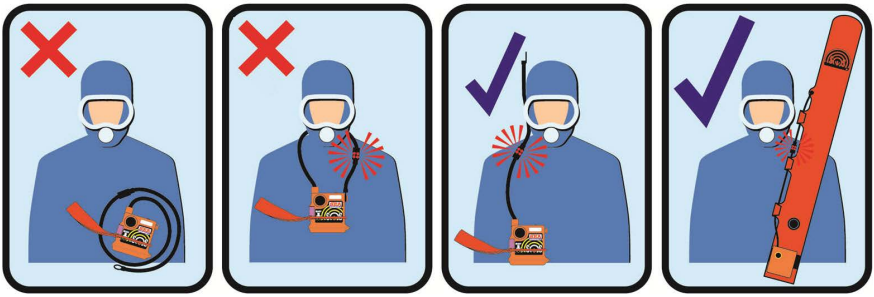
3. When the unit is immersed in water the **WATER SENSORS** will automatically activate the device.

   Note: After arming the unit it will beep 2 times to confirm it has been armed and a **GREEN LED** will flash every 3-5 seconds until is starts transmitting. A **RED LED** is displayed and short **BEEPS** are audible when transmitting.



Wearing the Sea Marshall AU9-D around the neck will reduce the tracking/alerting ranges to below those specified. MRT recommends fitting the device in a harness or attaching it to a dive belt with the

antenna positioned vertically. It may also be fitted to an inflatable surface marker buoy.



Disarming/Deactivation of all Sea Marshall AU9 PLDs

1. Lift and pull the **RUBBER O-RING** down and over the **ARMING SWITCH**.

2. Slide the **ARMING SWITCH** up to the **[OFF]** position

3. Ensure the **RUBBER O-RING** is positioned in the gap below the **ARMING SWITCH**.

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Disarming the Sea Marshall AU9-X, AU9-HT and AU9-WF After Auto Override Activation

1. Lift the **RUBBER O-RING** up and over the **ARMING SWITCH**.

2. Push the **ARMING SWITCH** down to the **[READY]** position until it clicks into place and then immediately slide the **ARMING SWITCH** up to the **[OFF]** position until it clicks into place.

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3. Move the **RUBBER O-RING** to the gap below the **ARMING SWITCH** to store the device in a disarmed state.

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5.1 Testing the Sea Marshall AU9

A full system test is performed prior to the Sea Marshall AU9 being installed into an MRT approved SOLAS rated PFD. The device is **[OFF]** when shipped in a PFD and needs to be configured in the **[READY]** state prior to use.

WARNING: After deployment into active service, a regular full system test of the Sea Marshall AU9 should be performed every 3 months. Do not test the Sea Marshall AU9 more than once per month as this could affect battery life and operation of the device in an emergency. MRT also mandates that the Sea Marshall AU9 must be returned to MRT, or an authorised MRT service agent, for annual servicing and recertification.

Low Power Function Test Mode: Battery Testing

Ensure the **ARMING SWITCH** is in the **[OFF]** position.

1. Press and hold the round rubber **ACTIVATION BUTTON** to activate low power function test mode.
2. Observe the **ANTENNA LED**:
   a. **GREEN LED** = Batteries OK, with the following specific functionality during testing:
      - A low power signal is transmitted with upswept tone.
      - Short **BEEPS** are audible at approximately 1 sec intervals.
      - **GREEN LED** flashes 7 times with every alternate audible **BEEP** (approximately 14 sec duration).
      - Audible **BEEPS** and low power transmission continues until the **ACTIVATION BUTTON** is released.

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b. No **LED** = Recertification required
c. **RED LED** = Recertification required

3. Stop pressing the **ACTIVATION BUTTON** to cancel low power function test mode.

Automatic Low Power Indication when [OFF]

The unit has automated battery status indications to indicate a low battery. When the Sea Marshall AU9 is **[OFF]** and unarmed a low battery is indicated by:

- Short **BEEPS** (approx every 15-20 seconds).
- **RED LED** flashes.

Verifying Low Power 121.xxMHz Test Transmissions

When in low power test mode, the Sea Marshall AU9 will display battery LED indications and transmit low power test transmissions.

Live units transmit on 121.5MHz and training units transmit on 121.65MHz. The low power transmission range is approximately 30 meters and transmissions can be verified using an MRT Crewguard MKII or MRT SARfinder MKIII receiver.

WARNING: When conducting a test or exercise on the SARfinder using the 121.65MHz frequency, it will automatically revert back to the live 121.5MHz frequency after 20 minutes. See the SARfinder User Manual for more information.

6 Recertification and Servicing

Annual recertification is essential to ensure the Sea Marshall AU9 operates effectively in a lifesaving situation when fitted to a SOLAS approved life jacket. Do not use your Sea Marshall AU9 if there are any signs of wear and tear, or if any functional tests fail. MRT Ltd. and authorised service agents offer a full and comprehensive service and repair facility for recertification of units and battery replacement.

WARNING: If annual recertification is not undertaken prior to the return for service date, as indicated on the unit each year, the operability and reliability of the unit will be severely affected and the unit will NOT BE CERTIFIED FOR ANY FURTHER USE. An audible beep will sound continuously and the LED will flash red continuously (until the battery expires) if the Sea Marshall AU9 has not been recertified as specified. MRT is not liable for any defect or failure of the unit and any resulting effect including Personal Injury or Death.

Cracks in seals or housings could allow moisture inside the unit, rendering it unreliable or unusable. If cracking is observed, or if it is possible that the unit has been damaged, please contact MRT or an authorised MRT service agent for it to be assessed, repaired or replaced as required.

How to Return Units for Recertification and Servicing

Please contact MRT at support@mrtsos.com, or your authorised service agent, to obtain an RMA tracking number for any units being returned for recertification and servicing. Record the RMA number and include it when returning units as it is used to track the device during the servicing and recertification process.

Operational Life

The Sea Marshall AU9 has a service life of 5 years and must be recertified annually. The battery must be replaced during annual servicing and the device should be replaced after 5 years. If the device fails a battery self-test at any time it should be returned to MRT, or an authorised MRT service agent for testing and recertification.

End of Life Statement

Marine Rescue Technologies hereby declares that all materials,

components and products supplied are in full compliance with RoHS & WEE directives. This product must be disposed of according to local laws and regulations. Because the product contains a battery it must be disposed of separately from household waste. Do not incinerate, but take it to a recycling facility.

7 Declaration of Conformity

Declaration of Conformity

Name of Manufacturer/Eu importer

Marine Rescue Technologies Ltd.
Marshall House, Zarya Court, Grovehill Road, Beverley, HU17 0JG
United Kingdom
sales@mrtsos.com
www.mrtsos.com

Declares that products:

AU9-HT, AU9-X , AU9-WF, AU9, AU9-D
Personal Locator Beacons

Conforms to the R&TTE Directive 1999/5/EC as attested by conformity with the following harmonized standards:

EN 300 152-2 V1.1.1:
Electromagnetic compatibility and Radio spectrum Matters (ERM); Maritime Emergency Position Indicating Radio Beacons (EPIRBs) intended for use on the frequency 121,5 MHz or the frequencies 121,5 MHz and 243 MHz for homing purposes only; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.

(Article 3.2)

ETSI EN 301 489-22 V1.3.1:

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 22: Specific conditions for ground based VHF aeronautical mobile and fixed radio equipment.

(EMC)

Conform to the Low Voltage Directive 2006/95/EC as attested by conformity with the following harmonized standard:

EN60950-1:2006:
Information technology equipment — Safety — Part 1: General requirements.

FCC ID – YFGAU9

Signed :

Name: Ken Gaunt

Position: CEO

Place: Beverley

Date: Feb 2014

8 AU9-X SIRA Certificate

sira
CERTIFICATION

1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 10ATEX4253** Issue: **1**

4 Equipment: **AU9X-CAT3 Emergency Position Indicating Radio Beacon**

5 Applicant: **Marine Rescue Technologies Ltd**

6 Address: Marshall House
Zarya Court
Grovehill Road
Beverley HU17 0JG
UK

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0:2006
EN 60079-0:2009 (used for guidance in respect of marking)
EN 60079-11:2007
EN 60079-25:2004 was used for reference

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:

II 3G
Ex ic IIB T4 Gc Ta = -20°C≤Ta≤+55°C

Project Number 28418

A C Smith
Certification Manager

This certificate and its schedules may only be reproduced in its entirety and without change.

Form 9402 Issue 2

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England
Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

SCHEDULE

TYPE EXAMINATION CERTIFICATE **Sira 10ATEX4253**
Issue 1

13 **DESCRIPTION OF EQUIPMENT**

The AU9X-CAT3 is a personnel-worn Emergency Position Indicating Radio Beacon (EPIRB). When armed, it is automatically activated after a set period of time when immersed in water. The unit transmits continuously on the international airband distress channel using the ITU-R distress call. It may be disarmed at any time.

The AU9X-CAT 3 comprises a waterproof plastic enclosure (normally orange), containing two small printed circuit boards (motherboard and a plug-in VHF TX board) and two Varta CRAA batteries. A flexible antenna contains a small LED PCB that will flash when activated.

Variation 1 - This variation introduced the following changes:

i. The existing batteries were approved to be arranged into a removable battery pack, part number 100013, as an alternative arrangement.
ii. The introduction of additional drawings which reflect the latest build.
iii. The applicants address was changed from Middleton On The Wolds, Driffield, East Yorkshire, YO25 9TZ, to that currently listed.

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

14.2 **Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	21 October 2010	R21774A/00	The release of the prime certificate.
1	26 April 2013	R28418A/00	The introduction of Variation 1.

15 **SPECIAL CONDITIONS FOR SAFE USE**

None

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed reports listed in Section 14.2.

17 **CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

This certificate and its schedules may only be reproduced in its entirety and without change.

Form 9402 Issue2

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England
Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com

9 AU9-D Pressure Test Certificate

PRESSURE TEST
CERTIFICATE OF CONFORMITY

Issued By Mimir Marine Ltd
Date of Issue 16/01/2013

MIMIR MARINE LTD

Omega House, Omega Business Park
Neptune Street, Hull
East Yorkshire, HU3 2BP
Tel. +44(0) 1482 665904
info@mimirmarine.com

Certificate Number
MMC-PR001-01

Page 1 of 1

PROJECT ID PR001
Description **Pressure to 100 metres depth**

Customer Marine Rescue Technologies
Beverley UK

COMMENTS This certificate is to confirm that a pressure test was performed on 08/January/2013 on the following equipment:

Tested Device
Man Overboard Beacon
Model AU9D
Units S/N: 10954, 10955, 10964

TEST

DESCRIPTION	TEST MEDIUM	METRES DEPTH	NO. OF CYCLES	UNIT S/N	REPORT
Pressurization rate: 18 metres/minute Depressurization rate: 18 metres/minute	Water	100	1 cycle per unit*	10954	PASSED
				10955	PASSED
				10964	PASSED

**The units were tested together*

Pressure Gauge: ASHCROFT Calibration Date: 30/August/2012 Serial Number: 1078007
Certificate No: EC-30023

Findings: The above equipment had satisfactory results at the time of the test and was witnessed tof function correctly post-test sequence.

MIMIR MARINE stamp

MIMIR MARINE LTD
PROJECT CODE PR001
CERTIFICATE No MMC-PR001-01

Print Name STEPHEN WATSON / RONAN EGGINTON **Signature** **Date** 16/01/2013 / 16/01/2013

Mimir Marine Ltd, Omega House, Neptune Street, Hull, East Yorkshire HU3 2BP. Tel ++44(0)1482 665904 Page 1 of 1

10 Warranty

It is important to register the purchase of MRT products by completing the warranty card enclosed with the product, or by completing the online form. Failure to complete registration could delay any warranty claim. Online product registration and MRT terms of sale conditions are available on the company's website at http://mrtsos.com/support/product-registration-and-warranty.

You can also complete the following warranty form and list the serial numbers of any devices you own, then return this information via email to support@mrtsos.com, or post to:

Marine Rescue Technologies
Marshall House, Zarya Court, Grovehill Road
Beverley
East Riding of Yorkshire
HU17 0JG, United Kingdom

Title	
First Name	
Surname	
Company Name	
Address 1	
Address 2	
Address 3	
Postcode/ZIP code	
Country	
Email	
Tel (incl. country code)	
Industry of Operation	
Country of Product Operation	

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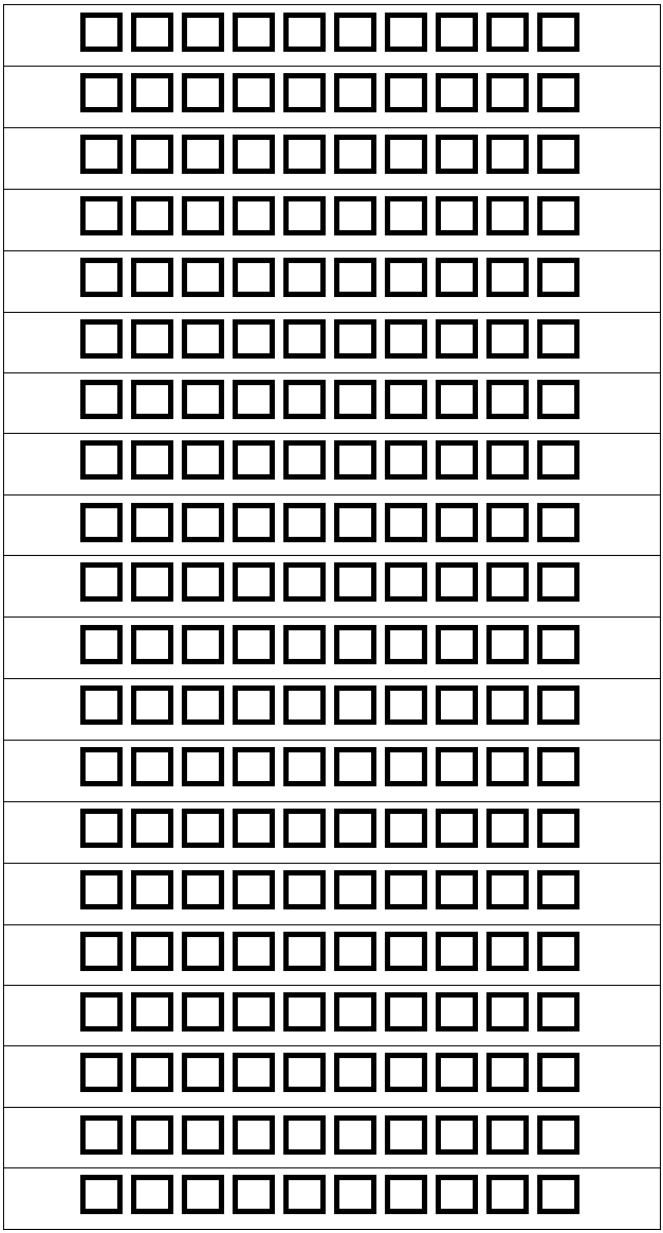
Please list the serial numbers from products purchased:



Personal information collected is treated as confidential and is protected by the Privacy Act 1988. We will use your information for the purpose for which you provided it, or as otherwise set out in our Privacy Policy. We will also use this information to contact you with important product updates. From time-to-time, we would like to keep you informed of new developments, offers and activities relating to Marine Rescue Technologies Ltd and its products.

If you do not wish to be contacted, please tick here ☐. Your personal information will not be released to any third party unless the law requires or permits it, or your permission is given.

11 Terms of Sale

1 Definitions & Interpretation

(a) The definitions and rules of interpretation in this clause apply in these Conditions.

Annual Maintenance/Support: an annual programme of maintenance, repairs and support in respect of marine safety equipment in accordance with relevant Maintenance Protocols available from the Supplier under an Annual Maintenance & Recertification Agreement.

Annual Maintenance & Recertification Agreement: the Supplier's separate Annual Maintenance & Recertification Service Agreement covering Annual Maintenance/Support and Annual Recertification.

Annual Recertification: means annual recertification of marine safety equipment as being in Good Working Order by the Supplier following completion of Annual Maintenance/Support available from the Supplier under an Annual Maintenance & Recertification Agreement.

Conditions: these Terms & Conditions of Sale.

Contract: the Customer's order and the Supplier's acceptance of it in accordance with clause 3(c), which incorporates these Conditions.

Customer: the person, firm or company who purchases Equipment from the Supplier.

Equipment: the equipment to be purchased by the Customer from the Supplier under the Contract, including all hardware and related Software, and all substitutions, replacements or renewals of such items and all related accessories, manuals and instructions provided (including without limitation any part or parts thereof).

Good Working Order: means operation in accordance with relevant operating manuals, specifications and other manufacturer documentation.

Intellectual Property Rights: patents, rights to inventions, copyright and related rights, trade marks, trade names, domain names, rights in get-up, rights in goodwill or to sue for passing off, unfair competition rights, rights in designs, rights in computer software, database rights, topography rights, moral rights, rights in confidential information (including without limitation know-how and trade secrets) and any other intellectual property rights, in each case whether registered or unregistered and including without limitation all applications for and renewals or extensions of such rights, and all similar or equivalent rights or forms of protection in any part of the world.

Maintenance Protocols: the Supplier's published procedures, requirements and protocols for routine preventative and corrective maintenance, repairs and support of marine safety equipment supplied by it (including hardware maintenance and repair, Software updates and maintenance) from time to time to ensure it is in Good Working Order.

Software: means one or more computer programs in object code format, whether stand alone or bundled with other hardware or software supplied as part of the Equipment, including embedded code, and all related documentation supplied under the Contract.

Supplier: Marine Rescue Technologies Limited (Company No. 04202403), Registered Office: Halifax House, 30-34 George Street, Hull, East Yorkshire HU1 3AJ.

VAT: value added tax chargeable under English law for the time being and any similar additional tax.

(b) Clause headings shall not affect the interpretation of these Conditions. References to clauses are to the clauses of these Conditions

(c) A **person** includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).

(d) A reference to a **company** shall include any company, corporation or other body corporate, wherever and however incorporated or established.

(e) Unless the context otherwise requires, words in the singular shall include the plural and in the plural include the singular.

(f) Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.

(g) A reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time.

(h) A reference to **writing** or **written** includes faxes and e-mail.

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2 Application of Conditions
(a) These Conditions shall:
(i) apply to and be incorporated in the Contract; and
(ii) prevail over any inconsistent terms or clauses contained in or referred to in the Customer's purchase order, confirmation of order, or specification, or implied by law, trade custom, practice or course of dealing.
(b) No addition to, variation of, exclusion or attempted exclusion of any term of these Conditions shall be binding on the Supplier unless in writing and signed by a duly authorised representative of the Supplier.
(c) Each of the Supplier and the Customer warrant to each other that it has full capacity and authority to enter into and perform the Contract, and that those signing the Contract are duly authorised to bind the party for whom they sign.

3 Basis of Sale
(a) Any quotation is valid for a period of 30 days only, and the Supplier may withdraw it at any time by notice to the Customer.
(b) Each order or acceptance of a quotation for Equipment by the Customer shall be deemed to be an offer by the Customer subject to these Conditions. The Customer shall ensure that its order is complete and accurate.
(c) A binding contract shall not come into existence between the Supplier and the Customer unless and until the Supplier issues a written order acknowledgement to the Customer, or the Supplier delivers the Equipment (as appropriate) to the Customer (whichever occurs earlier).
(d) The Supplier may deliver the Equipment by separate instalments. Each separate instalment shall be invoiced and paid for in accordance with the provisions of the applicable Contract. Each instalment shall be a separate Contract and no cancellation or termination by either party of any one Contract relating to an instalment shall entitle the Customer to repudiate or cancel any other Contract or instalment.
(e) No order for Equipment which has been acknowledged by the Supplier may be cancelled by the Customer, except with the agreement in writing of the Supplier and provided that the Customer indemnifies the Supplier in full against all loss (including without limitation loss of profit), costs (including without limitation the cost of all labour and materials used), damages, charges and expenses incurred by the Supplier as a result of cancellation. Details of cancellation charges is available from the Supplier upon request.
(f) Certain Software products require product activation prior to being fully enabled. Orders for Software purchases may not under any circumstances be cancelled after product activation, including those purchases and/or downloads originating through a web-based transaction.
(g) The United Nations Convention on Contracts for the International Sale of Goods shall not apply to any Contract made subject to these Conditions.

4 Quantity and Description
(a) The quantity and description of the Equipment shall be as set out in the Supplier's acknowledgement of order or (if there is no acknowledgment of order) quotation.
(b) All samples, drawings, descriptive matter, specifications and advertising issued by the Supplier, and any descriptions or illustrations contained in the Supplier's catalogues or brochures are issued or published for illustrative purposes only and they do not form part of the Contract.
(c) Any typographical, clerical or other error or omission in any sales literature, quotation, price list, acceptance of offer, invoice or other document or information issued by the Supplier shall be subject to correction without any liability on the part of the Supplier.
(d) The Supplier reserves the right (but does not assume the obligation) to make any changes in the specification of the Equipment which are required to conform with any applicable legislation or, where the Equipment is to be supplied to the Customer's specification, which do not materially affect their quality or performance.

5 Prices
(a) All prices are exclusive of delivery, packaging, packing, shipping, carriage, insurance, VAT and other taxes, levies, assessments, charges and duties applicable to the sale of the Equipment and import into the destination country. If any exemption from any taxes, duties or other charges is claimed, the

Customer must provide appropriate written evidence to the Supplier.
(b) The price of the Equipment shall be as stated in the Supplier's acknowledgement of order or quotation, or where no price has been quoted (or a quoted price is no longer valid), the price listed in the Supplier's price list current at the date of acceptance of the order.
(c) The Supplier reserves the right, by giving notice to the Customer at any time before delivery, to increase the price of such of the Equipment as has not been delivered to reflect any increase in the cost to the Supplier which is due to any factor beyond the control of the Supplier (including without limitation any foreign exchange fluctuation, currency regulation, alteration of duties, change in legislation, significant increase in the costs of labour, materials or other costs of manufacture), any change in delivery dates, quantities or specifications for the Equipment which is requested by the Customer, or any delay caused by any instructions of the Customer or failure of the Customer to give the Supplier adequate information or instructions.
(d) The prices payable for Annual Maintenance/Support and/or Annual Recertification shall be as stated in the Supplier's acknowledgement of order or as specified in the relevant Annual Maintenance & Recertification Agreement. The Supplier reserves the right, by giving sixty (60) days written notice to the Customer at any time, to increase the prices charged by the Supplier for Annual Maintenance/Support and/or Annual Recertification, unless otherwise specified in the relevant Annual Maintenance & Recertification Agreement or otherwise agreed in writing by the Supplier (for example, price changes for prepaid Annual Maintenance & Recertification will usually be agreed separately in writing between the parties).

6 Payment
(a) Subject to any special terms agreed in writing between the Customer and the Supplier, the Supplier may invoice the Customer for the price of the Equipment on or at any time after delivery of the Equipment, unless:
(i) the Equipment is to be collected by the Customer; or
(ii) the Customer wrongfully fails to take delivery of the Equipment,
and in either case the Supplier shall be entitled to invoice the Customer for the price at any time after the Supplier has notified the Customer that the Equipment is ready for collection.
(b) The Supplier may invoice the Customer for Annual Maintenance/Support and/or Annual Recertification in advance of the start of the relevant period, or as specified in the relevant Annual Maintenance & Recertification Agreement.
(c) Credit payment terms are only available to the Customer with the prior approval of the Supplier, and will be subject to an assessment of the Customer's creditworthiness. The Supplier may change the Customer's credit or payment terms at any time if (in the opinion of the Supplier) the Customer's financial condition or previous payment record justifies this.
(d) Subject to clause 6(c), unless an alternative payment period is stated in the Supplier's invoice, payment by the Customer shall be made within 30 days of the date of the Supplier's invoice, whether or not delivery has taken place or title in the Equipment has passed to the Customer.
(e) Unless otherwise specified in the Supplier's invoice, all payments shall be made in British Pounds (GBP) to the Supplier's designated bank account by direct debit, credit card or electronic transfer. Time for payment shall be of the essence of the Contract.
(f) If the Customer fails to make payment in full on the due date, the whole of the balance of the price of the Equipment and any Annual Maintenance/Support and/or Annual Recertification then outstanding shall become immediately due and payable and, without prejudice to any other right or remedy available to the Supplier, the Supplier shall be entitled to:
(i) terminate the Contract or suspend any further deliveries of Equipment and/or provision of warranty service or Annual Maintenance/Support and/or Annual Recertification (whether ordered under the same contract or not) to the Customer;
(ii) appropriate any payment made by the Customer to such of the Equipment or Annual Maintenance/ Support or Annual Recertification (whether under this Contract or any other contract between the Customer and the Supplier) as it thinks fit (despite any purported appropriation by the Customer);
(iii) charge interest on the amount outstanding from the due date to the date of receipt by the Supplier (whether or not after judgment), at the annual rate of 5% above the base lending rate from time to time of NatWest Bank plc, accruing on a daily basis and being compounded quarterly until payment is made,

whether before or after any judgment. The Supplier reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998;
(iv) make a storage charge for any undelivered Equipment at its current rates from time to time;
(v) a general lien on all Equipment and property belonging to the Customer, exercisable in respect of all sums lawfully due from the Customer to the Supplier. The Supplier shall be entitled, on the expiry of 14 days' notice in writing, to dispose of such Equipment or property in such manner and at such price as it thinks fit and to apply the proceeds towards the amount outstanding.
(g) All sums payable to the Supplier under the Contract shall become due immediately on its termination, despite any other provision of the Contract. This clause 6(g) is without prejudice to any right to claim for interest under the law, or any right under the Contract.
(h) The Supplier may, without prejudice to any other rights it may have, set off any liability of the Customer to the Supplier against any liability of the Supplier to the Customer.

7 Delivery of Equipment and Acceptance
(a) The Supplier shall use its reasonable endeavours to deliver the Equipment on the date or dates specified in the Supplier's acknowledgement of order, but any such date is approximate only and time is not of the essence as to delivery. If no dates are so specified, delivery shall be within a reasonable time of acceptance of the order.
(b) The Equipment shall be delivered to the Customer's delivery location specified in the Supplier's acknowledgement of order or such other location agreed in writing prior to despatch. Equipment may be delivered by the Supplier in advance of the quoted delivery date on giving reasonable notice to the Customer.
(c) Delivery shall be made during normal business hours (excluding bank or public holidays). The Supplier may levy additional charges for any deliveries made outside such hours at the Customer's request.
(d) The Customer shall be responsible (at the Customer's cost) for preparing the delivery location for the delivery of the Equipment and for the provision of all necessary access and facilities reasonably required to deliver the Equipment. If the Supplier is prevented from carrying out delivery or installation on the specified date because no such preparation has been carried out, the Supplier may levy additional charges to recover its loss arising from this event.
(e) The Customer shall be deemed to have accepted the Equipment when the Customer has had 5 days to inspect it after delivery and has not notified the Supplier in writing under clause 12(b).
(f) The Supplier shall be responsible for any damage, shortage or loss in transit, provided that the Customer notifies it to the Supplier (or its carrier, if applicable) within three days of delivery or the proposed delivery date of the Equipment and that the Equipment has been handled in accordance with the Supplier's stipulations. Any remedy under this clause 7(f) shall be limited, at the option of the Supplier, to the replacement or repair of any Equipment which is proven to the Supplier's satisfaction to have been lost or damaged in transit.
(g) The Customer shall be responsible for complying with any legislation governing the importation of the Equipment into the country of destination, and subsequent the export and re-export of the Equipment. If in order to acquire or use the Equipment it must be registered with any governmental authority, it is the Customer's responsibility to obtain and maintain such registration and to pay any associated costs, expenses or taxes.

8 Risk and Property
(a) The Equipment shall be at the risk of the Supplier until delivery to the Customer. The Supplier shall off-load the Equipment at the Customer's risk.
(b) Ownership of the Equipment shall pass to the Customer on the later of completion of delivery (including without limitation off-loading), or when the Supplier has received in full in cleared funds all sums due to it in respect of:
(i) the Equipment; and
(ii) all other sums which are or become due to the Supplier from the Customer on any account.
(c) Until ownership of the Equipment has passed to the Customer under clause 8(b), the Customer shall:
(i) hold the Equipment on a fiduciary basis as the Supplier's bailee;
(ii) store the Equipment (at no cost to the Supplier) in satisfactory conditions and separately from all the Customer's other equipment or that of a third party, so that it remains readily identifiable as the Supplier's

property;
(iii) not destroy, deface or obscure any identifying mark or packaging on or relating to the Equipment; and
(iv) keep the Equipment insured on the Supplier's behalf for its full price against all risks with a reputable insurer, ensure that the Supplier's interest in the Equipment is noted on the policy, and hold the proceeds of such insurance on trust for the Supplier and not mix them with any other money, nor pay the proceeds into an overdrawn bank account.
(d) The Customer's right to possession of the Equipment before ownership has passed to it shall terminate immediately if any of the circumstances set out in clause 17 arise or if the Customer encumbers or in any way charges the Equipment, or if the Customer fails to make any payment to the Supplier on the due date.
(e) The Customer grants the Supplier, its agents and employees an irrevocable licence at any time to enter any premises where the Equipment is or may be stored in order to inspect it, or where the Customer's right to possession has terminated, to remove it. All costs incurred by the Supplier in repossessing the Equipment shall be borne by the Customer.
(f) On termination of the Contract for any reason, the Supplier's (but not the Customer's) rights in this clause 8 shall remain in effect.
(g) The Supplier may appropriate payments by the Customer to such Equipment as it thinks fit, notwithstanding any purported appropriation by the Customer to the contrary.

9 Inspection and Testing of Equipment
The Supplier shall:
(i) test and inspect the Equipment on delivery to ensure that it complies with the requirements of the Contract; and
(ii) if so requested by the Customer, give the Customer reasonable advance notice of such tests (which the Customer shall be entitled to attend).

10 Software Licence
(a) If the Supplier refers to a software licence in its acknowledgment of order, the price of the Equipment includes the licence fee for the Customer's right to use the Software.
(b) If the Customer is provided with any operating system software licence in respect of the Software, the Customer shall sign and return it to the Supplier within seven days of installation of the software, unless the licence has been supplied on a "shrink-wrap" or "click-wrap" basis.
(c) If no software licence has been provided to the Customer, the Customer hereby accepts a non-exclusive licence to use the object code of the Software in conjunction with the Equipment for the Customer's own internal purposes in accordance with the documentation (if any) provided with the Software on the following conditions:
(i) the Customer shall not copy (except to the extent permissible under applicable law which is not capable of exclusion by agreement) or reproduce, translate, adapt, vary or modify the software, nor communicate it to any third party, without Supplier's prior written consent;
(ii) the Customer shall not use the Software on any equipment other than the Equipment, and shall not remove, adapt or otherwise tamper with any copyright notice, legend or logo which appears in or on the Software on the medium on which it resides;
(iii) such licence shall be terminable by either party on 28 days' written notice, provided that the Supplier may terminate only if the continued use or possession of the Software by the Customer infringes the developer's or a third party's rights, or the Supplier is compelled to do so by law, or if the Customer has failed to comply with any term of the Contract; and
(iv) on or before the expiry of this licence, the Customer shall return to the Supplier all copies of the Software in its possession.
(d) The Customer's Software licence under clause 10(c) is transferable by the Customer, subject to the Customer providing to the Supplier the name, address and location of transferee and payment of any applicable fees to the extent permissible under local laws. The Customer will immediately upon transfer deliver all copies of the Software to the transferee. The transferee must agree in writing to the Supplier's Software licence terms. In addition, the Customer's licence terms will be binding on involuntary transferees, notice of which is hereby given. Customer's licence will automatically terminate upon

transfer.

11 Maintenance & Support - IMPORTANT

(a) It is the Customer's responsibility to arrange for Annual Maintenance/Support and Annual Recertification of all Equipment to be undertaken by the Supplier in accordance with the Maintenance Protocols for that Equipment under a separate Annual Maintenance & Recertification Agreement. The Customer will be responsible for all additional charges payable under the Annual Maintenance & Recertification Agreement and for all transportation expenses incurred in returning Equipment to the Supplier for the provision of this service.

(b) Orders placed by the Customer for Annual Maintenance/Support and Annual Recertification are subject to the Supplier's terms and conditions relevant to the Equipment and services concerned. The Customer also agrees, if required by the Supplier, to enter into separate written Annual Maintenance & Recertification Agreement(s) with the Supplier (in the Supplier's then current form) setting out the terms and conditions upon which such services will be provided.

(c) Eligibility of Equipment for Annual Maintenance/Support and Annual Recertification is limited to Equipment at current specified revision levels.

(d) The Customer is responsible for removing any Equipment not eligible for Annual Maintenance/Support or Annual Recertification to enable the Supplier to perform these services. Additional charges, calculated at the Supplier's standard rates, may be incurred for any extra work caused by such Equipment.

(e) The Customer is responsible for maintaining a procedure external to the Equipment to reconstruct lost or altered Customer files, data or programs.

(f) Subject to the terms of any applicable Annual Maintenance & Recertification Agreement, by giving not less than sixty (60) days' written notice to the other party:

(i) the Customer may delete provision of Annual Maintenance/Support and Annual Recertification in respect of any Equipment, or may cancel any related support agreement; or

(ii) the Supplier may delete Equipment no longer included in the Supplier's support offering or may cancel a support agreement.

(g) Subject to the terms of any applicable Annual Maintenance & Recertification Agreement, the Customer may not assign or transfer a support agreement without the Supplier's prior written consent. Any attempted assignment or transfer without such consent will be void. As conditions to such consent; (i) the assignee or transferee must agree in writing to the applicable support agreement; (ii) the Supplier may require that all Equipment included within a support agreement is in good operating condition; and (iii) the Supplier may impose applicable charges in connection with the assignment or transfer.

(h) If Annual Maintenance and Annual Recertification is not promptly undertaken on any item of Equipment every 12 months in accordance with the Maintenance Protocols for that Equipment, this may severely affect the operability and safety of that equipment, and accordingly such item is not safe for any further use and the Supplier's warranty provided in respect of the item of Equipment concerned (under clause 12 below) will be void. The Supplier also excludes all liability for continued use of that item of Equipment in these circumstances (see clause 14(e) below).

12 Limited Warranty

(a) The Supplier warrants to the Customer that the Equipment is free from defects in workmanship and materials. The Supplier undertakes (subject to the remainder of this clause 11(h)), at its option, to repair or replace any Equipment (other than consumable items) which is found to be defective as a result of faulty materials or workmanship within 12 months from the date of delivery.

(b) The Supplier shall not in any circumstances be liable for a breach of the warranty contained in clause 12(a) unless:

(i) the Customer gives written notice of the defect to the Supplier within five (5) days of the time when the Customer discovers or ought to have discovered the defect; and

(ii) after receiving the notice, the Supplier is given the option of testing or inspecting such Equipment at its current location or moving it to the Supplier's premises, and the Customer shall (if asked to do so by the Supplier) return such Equipment to the Supplier's place of business (or those of its agents or sub-contractor) at the Supplier's cost.

(c) The Supplier shall not in any circumstances be liable for a breach of the warranty in clause 12(a) if:

(i) the Customer makes any use of Equipment in respect of which it has given written notice under clause

12(b)(i); or
(ii) the defect has arisen because the Customer failed to follow the Supplier's oral or written instructions as to the storage, commissioning, operation or use of the Equipment or (if there are none) good industry practice; or
(iii) the defect has arisen as a result of misuse, neglect, accident, mishandling or unauthorised or incorrect repair or maintenance by any person other than the Supplier, or improper installation, unauthorised modification, or loss or damage in transit; or
(iv) the serial number to the Equipment concerned has been removed, defaced, or changed; or
(v) the defect has arisen as a result of any information, design or any other assistance supplied or furnished by the Customer (or a third party on the Customer's behalf); or
(vi) the Customer has failed to comply with its obligations under clause 11(a) (including the terms of any Annual Maintenance & Recertification Agreement) relating to maintenance of the Equipment concerned.
(d) Insofar as the Equipment hardware comprises or contains equipment or components which were not manufactured or produced by the Supplier, the Customer is entitled only to such warranty as the Supplier has received from the manufacturer. The Supplier shall use reasonable endeavours to transfer the benefit of such warranty to the Customer.
(e) The warranty contained in clause 12(a) does not guarantee any minimum range or coverage of the Equipment or any ancillary equipment.
(f) If the Supplier repairs or replaces Equipment as a result of any defect which falls outside the scope of the warranty in clause 12(a) then the Customer is responsible for payment of all the Supplier's associated costs (including the costs of transportation, investigation and replacement parts and labour charges) at the Supplier's standard rates at the relevant time.
(g) Whenever repairing Equipment the Supplier may, at its option, repair or replace Equipment parts or sub-assemblies with new or reconditioned parts and sub-assemblies.
(h) The Supplier warrants that any of the Supplier's own standard Software will substantially conform to its published technical specifications. Any Software supplied with the Equipment which was not produced by the Supplier is warranted in accordance with any End User License Agreement issued by the licensor(s) of that software which is supplied with the Equipment. The Supplier warrants all Software products against failure of programming instructions due to defects in materials and workmanship when properly installed and used on the Supplier's Equipment hardware. The Supplier is not responsible in any way for ancillary equipment, hardware or software not supplied by the Supplier which is attached to or used in connection with the Equipment, or for the operation of the Equipment with any ancillary equipment, hardware or software and all such equipment, hardware or software is expressly excluded from the Supplier's warranty.
(i) Any repaired or replacement Equipment shall be under warranty for the unexpired portion of the 12 month period referred to in clause 12(a).

13 Supplier remedy
(a) If the Supplier's performance of its obligations under the Contract is prevented or delayed by any act or omission of the Customer (other than by reason of a Force Majeure Event under clause 18), the Customer shall in all circumstances be liable to pay to the Supplier all reasonable costs, charges or losses sustained by it as a result, subject to the Supplier notifying the Customer in writing of any such claim it might have against the Customer in this respect.

14 Limitation of Liability
(a) The following provisions set out the entire financial liability of the Supplier (including without limitation any liability for the acts or omissions of its employees, agents and sub-contractors) to the Customer in respect of:
(i) any breach of the Contract howsoever arising; and
(ii) any representation, misrepresentation (whether innocent or negligent), statement or tortious act or omission (including without limitation negligence) arising out of or in connection with the Contract.
(b) All warranties, clauses and other terms implied by statute or common law are excluded from the Contract to the fullest extent permitted by law.
(c) Nothing in these Conditions excludes or limits the liability of the Supplier for:
(i) death or personal injury caused by the Supplier's negligence; or

(ii) fraud or fraudulent misrepresentation.
(d) Subject to clause 14(b) and clause 14(c):
(i) the Supplier shall not in any circumstances be liable, whether in tort (including without limitation for negligence or breach of statutory duty howsoever arising), contract, misrepresentation (whether innocent or negligent) or otherwise for:
(i) any loss of revenue, business, anticipated savings or profit or any loss of use or value; or
(ii) downtime costs, loss of data or data restoration costs, or
(iii) any special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;
in each case, even if foreseeable. ("**anticipated savings**" denotes any expense which the Customer expected to avoid incurring or to incur in a lesser amount then would otherwise have been the case); and
(ii) the Supplier's total liability in contract, tort (including without limitation negligence and breach of statutory duty howsoever arising), misrepresentation (whether innocent or negligent), restitution or otherwise, arising in connection with the performance or contemplated performance of the Contract shall be limited to the price payable for the Equipment (together with, if applicable, the price of any Annual Maintenance/Support and Annual Recertification payable to the Supplier under the Contract).
(e) Subject to clause 14(c), the Supplier excludes all liability for any defects in any item of Equipment if Annual Maintenance and Annual Recertification is not undertaken every 12 months in accordance with the Maintenance Protocols for that Equipment, including any resulting personal injury or death to users of that item of Maintained Equipment.

15 Intellectual Property Rights
(a) Title, ownership, and all Intellectual Property Rights in the Equipment (or any part thereof) and any copy, portion, or modification thereof, shall not transfer to the Customer and shall remain the Supplier's property (or that of the Supplier's licensors). The Supplier and its licensors retain all right, title and interest in the Software and no rights are granted to the Customer except as expressly set out in these Conditions. The Customer shall not at any time make any unauthorised use of such Intellectual Property Rights, nor authorise or permit any of its agents or contractors or any other person to do so. Third party licensors may protect their rights in the Software in the event of any violation of these Conditions.
(b) The Customer agrees not to copy, modify, alter, translate, disassemble, or reverse engineer the Equipment (including without limitation any embedded Software), or attempt to disable any security devices or codes incorporated in the Equipment, except as permitted by law. The Customer must not remove, alter, or obscure any printed or displayed legal notices contained on or in the Equipment.
(c) If the Supplier manufactures the Equipment, or applies any process to it, in accordance with a specification submitted or prepared by the Customer or any other information provided by the Customer, the Customer shall indemnify and keep indemnified the Supplier against all losses, damages, costs, claims, demands, liabilities and expenses (including without limitation consequential losses, loss of profit and loss of reputation, and all interest, penalties and legal and other professional costs and expenses) awarded against or incurred by the Supplier in connection with, or paid or agreed to be paid by the Supplier in settlement of, any claim for infringement of any third party Intellectual Property Rights which results from the Supplier's use of the Customer's specification or such other information. The indemnity shall apply whether or not the Customer has been negligent or at fault and does not limit any further compensation rights of the Supplier.

16 Confidentiality and Supplier's Property
(a) The Customer shall keep in strict confidence all technical or commercial know-how, specifications, inventions, processes or initiatives which are of a confidential nature and have been disclosed to the Customer by the Supplier or its agents, and any other confidential information concerning the Supplier's business or its products which the Customer may obtain. The Customer shall restrict disclosure of such confidential material to such of its employees, agents or sub-contractors as need to know the same for the purpose of discharging the Customer's obligations to the Supplier, and shall ensure that such employees, agents or sub-contractors are subject to obligations of confidentiality corresponding to those which bind the Customer.
(b) All materials, equipment and tools, drawings, specifications and data supplied by the Supplier to the Customer shall at all times be and remain the exclusive property of the Supplier, but shall be held by the Customer in safe custody at its own risk and maintained and kept in good condition by the Customer until

returned to the Supplier, and shall not be disposed of or used other than in accordance with the Supplier's written instructions or authorisation.
(c) This clause 16 shall survive termination of the Contract, however arising.

17 Termination
(a) Without prejudice to any other right or remedy available to the Supplier, the Supplier may terminate the Contract or suspend any further deliveries under the Contract without liability to the Customer and, if the Equipment has been delivered but not paid for, the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary if:
(i) the ability of the Customer to accept delivery of the Equipment is delayed, hindered or prevented by circumstances beyond the Customer's reasonable control; or
(ii) an order is made or a resolution is passed for the winding up of the Customer, or circumstances arise which entitle a court of competent jurisdiction to make a winding-up order in relation to the Customer; or
(iii) an order is made for the appointment of an administrator to manage the affairs, business and property of the Customer, or documents are filed with a court of competent jurisdiction for the appointment of an administrator of the Customer, or notice of intention to appoint an administrator is given by the Customer or its directors or by a qualifying floating charge holder (as defined in paragraph 14 of Schedule B1 to the Insolvency Act 1986); or
(iv) a receiver is appointed of any of the Customer's assets or undertaking, or if circumstances arise which entitle a court of competent jurisdiction or a creditor to appoint a receiver or manager of the Customer, or if any other person takes possession of or sells the Customer's assets; or
(v) the Customer makes any arrangement or composition with its creditors, or makes an application to a court of competent jurisdiction for the protection of its creditors in any way, or becomes bankrupt; or
(vi) the Customer ceases, or threatens to cease, to trade; or
(vii) the Customer takes or suffers any similar or analogous action to any of the foregoing in any jurisdiction in consequence of debt.
(b) Termination of the Contract, however arising, shall not affect or prejudice the accrued rights of the parties as at termination or the continuation of any provision expressly stated to survive or implicitly surviving termination.

18 Force Majeure
The Supplier reserves the right to defer the date of delivery, or to cancel the Contract or reduce the amount of Equipment ordered, if it is prevented from or delayed in carrying on its business by acts, events, omissions or accidents beyond its reasonable control, including without limitation strikes, lock-outs or other industrial disputes (whether involving the workforce of the Supplier or any other party), failure of a utility service or transport or telecommunications network, act of God, war, riot, civil commotion, malicious damage, compliance with any law or governmental order, rule, regulation or direction, accident, breakdown of plant or machinery, fire, flood, storm or default of suppliers or sub-contractors (**Force Majeure Event**).

19 Notices
Any notice required to be given pursuant to the Contract shall be in writing and shall be delivered by hand or sent by pre-paid first-class post or recorded delivery post to the address of the party as set out in these Conditions, or such other address as may be notified by one party to the other. A notice delivered by hand is deemed to have been received when delivered (or, if delivery is not in business hours, 9.00 am on the first business day following delivery). A correctly addressed notice sent by pre-paid first-class post or recorded delivery post shall be deemed to have been received at the time at which it would have been delivered in the normal course of post.

20 Miscellaneous
(a) A waiver of any right under the Contract is only effective if it is in writing and signed by or on behalf of the waiving party, and it applies only to the party to whom the waiver is addressed and the circumstances for which it is given.
(b) If any provision of these Conditions (or part of a provision) is found by any court or administrative

body of competent jurisdiction to be invalid, unenforceable or illegal, the other provisions shall remain in force.
(c) Each party acknowledges that, in entering into the Contract and the documents referred to in it, it does not rely on any statement, representation, assurance or warranty (Representation) of any person (whether a party to the Contract or not) other than as expressly set out in the Contract or those documents.
(d) Each party agrees that the only rights and remedies available to it arising out of or in connection with a Representation shall be for breach of contract. Nothing in this clause shall limit or exclude any liability for fraud.
(e) The Customer shall not, without the prior written consent of the Supplier, assign, transfer, charge, sub-contract or deal in any other manner with all or any of its rights or obligations under the Contract. The Supplier may at any time assign, transfer, charge, sub-contract or deal in any other manner with all or any of its rights or obligations under the Contract.
(f) The Contract is made for the benefit of the parties to it and (where applicable) their successors and permitted assigns, and is not intended to benefit, or be enforceable by, anyone else.
(g) The Contract and any disputes or claims arising out of or in connection with it or its subject matter or formation (including without limitation disputes or claims) are governed by and construed in accordance with the law of England. The parties irrevocably agree that the courts of England have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with the Contract or its subject matter or formation (including without limitation disputes or claims).

Important Note: Contact MRT for the latest terms and conditions or visit http://mrtsos.com/support/product-registration-and-warranty.

12 Disclaimer

The Sea Marshall AU9 is an emergency rescue transmission device that should only be activated as a last resort. Misuse or false activation is unlawful and irresponsible, and could result in prosecution or penalty.

The Sea Marshall AU9 should not be relied on as the only source of man overboard notification and the vessel owner, operator or master must exercise common prudence and good seamanship at all times. Use of the Sea Marshall AU9 in no way reduces liability of the vessel's master and crew who have the primary responsibility for safety on board.

No device is 100% fail safe nor can it guarantee safe rescue in an emergency. When activated, the Sea Marshall AU9 is a Maritime Survivor Locating Device transmitting on the 121.5 MHz search and rescue (SAR) frequency, but requires subsequent human interaction to acknowledge and respond to the distress alert.

The actual time and success of rescue is therefore dependent on all these contributing factors and as such, is outside the control of MRT.

This user manual contains important information that must be adhered to for reliable use and operation of the product. It is the owner's sole responsibility to make the effort to read this manual and to ensure that the equipment's operation and limitations are understood. Visit the MRT website www.mrtsos.com to download the latest user manuals for all products. MRT reserves the right to change specifications, equipment, installation and maintenance instructions without notice as part of the company's policy of continuous product development and improvement.

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13 Trademark Notice

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14 Technical Specifications

Environmental	
Waterproofing	IP68
Operating temp	-20° to +70°C
Storage Temp	-55° to +70°C
Operating humidity	to 95% non-condensing
Shock	Eurocae ED-14F
Vibration	Eurocae ED-14F
Compass safe distance	30cms
Flammability Rating	UL 94 V-0
Battery	Recertification required annually
Buoyancy	5%
Transportation	UN 3091
Physical	
Dimensions (Case)	80mm wide x 95mm high x 35mm deep
Weight	250g approximately
Antenna Visible Length	Approx. 50cm Helicopter Transit model; Approx. 105cm all other models
Standards Applied	
EMC	EN 301 489-22 V1.3.1, EN 301 489-1 V1.8.1
Electrical Safety	EN 60950-1:2006
Marine	EN 300 152 V1.1.1
Radio (121.5MHz)	EN 300 152 V1.1.1
Approvals	CE; FCC ID YFGAU9; ATEX—Xone 2; Ex II 3G (AU9X only) Sira 10ATEX4253 for model AU9-X Zone 2 ONLY; CAA flight approved (AU9-HT only)
Electrical	
Airband frequencies	Live Device 121.5 MHz Orange Case; Test Device 121.65MHz Green Case
Bandwidth	25kHz (in alignment with ETSI)
Ouput Power	100mW or 500mW depending on model
Modulation	Continuous swept tone A3X
Signaling type	ITU-RM-690-1
Operational	
Operating time (full power)	100mW = 24 hours; 500mW = 24 hours
Standby battery life	12 months maximum battery life if armed 24/7 (5 years when unarmed)
Arming Indications: AU9, AU9-X, AU9-HT and AU9-WF units	After arming the unit it will beep 3 times to confirm it has been armed and a **GREEN LED** flashes every 60 seconds thereafter.
Activation of AU9, AU9-X, AU9-HT and AU9-WF units	Manual button press to activate; Automatic 2 seconds water activation in **[READY]** state; 40 second automatic water activation override when in **[OFF]** state (AU9-X, AU9-HT and AU9-WF units only)
Activation of AU9-D	Slide the arming switch to **[READY]** to arm and activate the Sea Marshall AU9-D when immersed in water
Alerts when active (all models): antenna LED indications and audio via internal speaker	**SOS BEEPs** (80dB) are heard approximately every 30 seconds and flashing **RED LEDs** are visible when the unit is transmitting on full power
Operational Life	5 years

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